

Notes on some new and rare Lepidoptera from South Africa, with special reference to Southern Rhodesia

by

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New and unrecorded butterflies are continually being captured in the sub-continent, and this paper is an attempt to acquaint collectors and others interested in this Order with the new acquisitions of workers in this Colony and elsewhere. The Vumba Mountains and our Eastern Border have again proved to be the richest sources of novelties, and it is mainly owing to help given by collectors from those parts that I have been able to compile these notes.

***Papilio junodi* Trim. Plate X. Fig. 3.**

Allied to *polistratus*, but with lighter markings somewhat differently arranged and much broader. The specimen herein figured was captured by Mr. B. D. Barnes of Vumba, in the Witchwood Valley (about 2500' a.b.s.) below the Vumba Mountains. It is a very rare insect and its appearance in Southern Rhodesia is noteworthy.

***Papilio ophidicephalus chirinda* Van Son.**

This newly described form of the well-known *Papilio ophidicephalus* occurs all along our Eastern Border, wherever the forest is thick enough, for it is essentially a forest dwelling insect. Mr. Van Son of the Transvaal Museum has lately published a paper on the species, which has certainly cleared up the muddle which existed before; besides naming our form, he has also described a variety of it with wider bars closing the cells, which he has named var. *barnesi*. It flies with the type.

***Appias sabina* F.**

This is a somewhat rare butterfly in Southern Rhodesia, and is seldom seen in collections made in this country. Mr. Barnes has taken a specimen of the female form *phoebe* Butler on the Vumba Mountains. This is the first record of this form having been taken here.

***Appias sylvia* Fab.**

A female of this species was captured in the Chirinda Forest in February, 1924. Males have been taken near the Portuguese Border at Sipungabera, but it seems to be very rare in this Territory.

Dixea pigea f. rubrobasalis Lanz.

This form is common in some dongas in the Lomagundi District of Southern Rhodesia. The female varies considerably in the amount and intensity of the orange basal markings. Some have white hindwings, with large black submarginal spots and others yellow with small marginal spots, but all have the bases of the forewings orange or orange-yellow. They vary in expanse from 53 to 49 mm. The males shew no appreciable difference except in the dimensions of the marginal dots. The winter or dry season forms of both sexes are distinct. The male is smaller, more creamy-white with little or no apical black margin. The female is much smaller, averaging from 45 to 41 mm., and yellowish white, with brownish black linear apices, seldom spotted at the extremities of the veins, and with a slight orange suffusion in the cell only. Hindwing white or yellowish white, costal margin narrowly yellow, in some cases with small dots on the extremities of the veins. Their distribution is very local and I took them only in certain dongas on the Eastern side of the Hunyani River, North of Sinoia.

Mylothris yulei f. ertli Suff.

Fairly common in the Chirinda Forest, and as far as I can ascertain, found nowhere else in this country.

Mylothris sagala f. crawshayi Btlr.

Common on the Vumba Mountains. Nearly related to *M. trimeni*; but with the black markings more accentuated and wider.

Mylothris rubricosta Mab.

Fairly common at the Victoria Falls. It cannot be mistaken for any other species, as it is smaller and has a red streak along the costal margin. The female is duller white, but has the red markings as in the male. Generally found sucking at small shallow-flowered plants, and is easily taken.

Mylothris poppea f. hilara Karsch.

Very like *yulei*, but with the bases dark orange and the apical black margins wider. One specimen taken in Chirinda Forest in January, 1930. Probably overlooked or mistaken previously for one of the commoner species.

Danais petiverana D. & H.

A common tropical species taken as far south as the Oliphants River in the Transvaal. Also occurs at Wankie, and not uncommon near the Hibernian Mine in the Lomagundi District. Flying with *Papilio leonidas* which it closely resembles. It occurs there as late as the 15th of May.

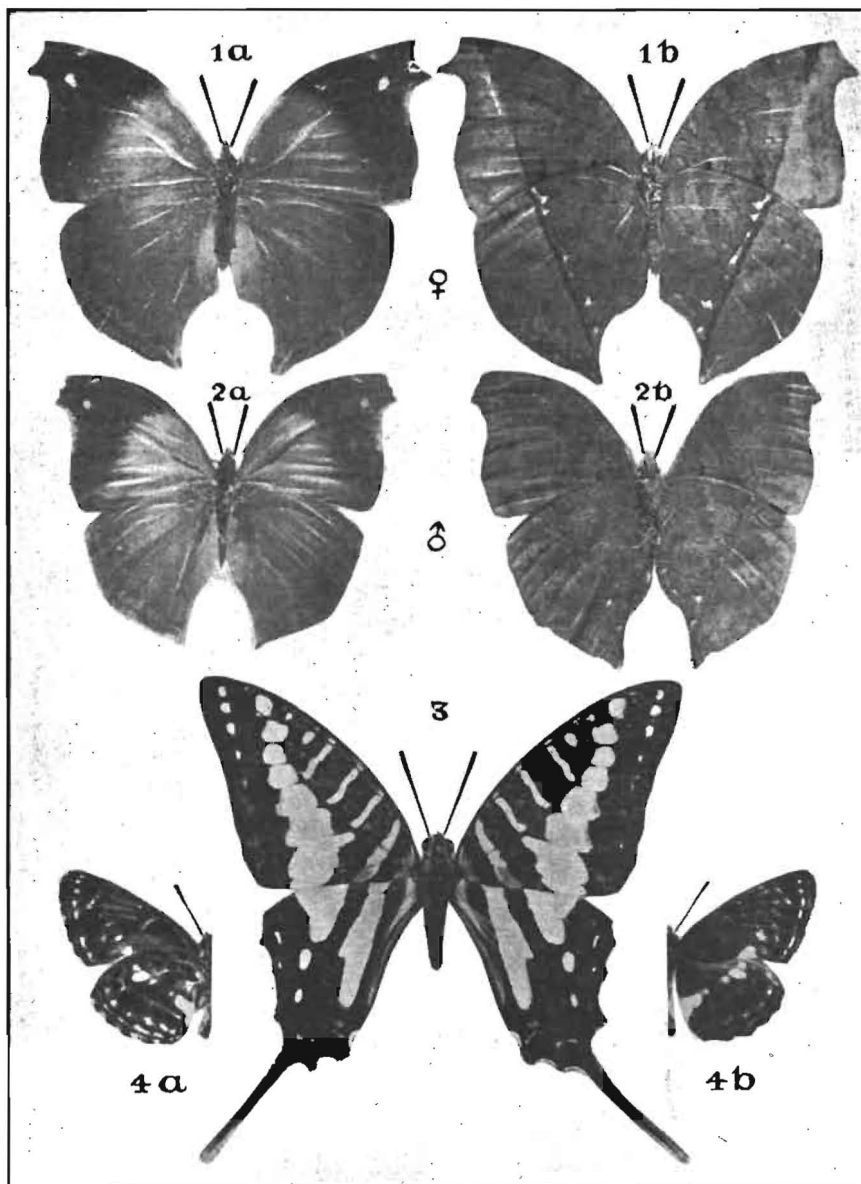


Plate X.

Figs. 1a, 1b, 2a and 2b: *Salamis amaniensis* Voss. Mt. Selinda, S. Rh.

Fig. 3: *Papilio junodi* Trim. Witchwood Valley, S. Rhod.

Figs. 4a (underside) and 4b (upperside): *Neptis sac lava marpessa* ab. *shepardi* ab.nov. Meikles Jungle (P. A. Sheppard.)

***Ypthima mashuna* Trim.**

Our smallest *Ypthima*, and taken at Rusape in a particularly cold July, inhabiting a swampy piece of ground to the North of the township in considerable numbers. Widely distributed in Southern Rhodesia in suitable localities.

***Charaxes druceanus proximans* J. & T.**

A distinct race of this beautiful *Charaxes* found in the Umtali District, where it has always been regarded as *druceanus* Butler. The male is far more foxy red above with the median band wider, especially at the inner margin. The subapical black spot near the costal margin is larger, and the three spots below it are more distinct and rectangular. The median band of the hindwing is also wider and the spots on the forewing are more widely separated with a black spot in area 3. The female is lighter orange red above, not so red as the male. In this it differs from the typical *druceanus*, the female of which is dark brown with a yellowish median band as is also the female of *d. moerens*, Jord. which is the form from the Transvaal and Natal. In *d. proximans* the median band is very wide (11.5 mm. in a specimen in my collection) and in areas 5, 6, 7 and 8, only slightly narrower and contiguous. The undersides differ in that the median silver band is broader, and the silver margined black spots in areas 3 and 4 are indented proximally, instead of being straight as in *moerens*. The outer margin of the median band of the hindwing is straight and very wide (10 mm. at its widest). The submarginal band has very little red in it, and what there is, is very evenly distributed at the distal end of the silvery spots. The general tone of the ground colour below is more fulvous than red, but although not varying in the series before me, it may do so in individuals. All my specimens are from the Umtali District and taken by Messrs. Sheppard and Barnes. Specimens of the Transvaal *d. moerens* were given me by Mr. van Son of the Transvaal Museum and I have others from Haenertsburg (J. Swinburne Coll.).

***Charaxes nichetes leoninus* Butler.**

Another rare *Charaxes* in this country, which has been taken in the Umtali and Lomagundi Districts. This southern form is much lighter than the type form, and it appears to frequent mountainous country less than most species of the genus.

***Charaxes xiphares vumbui* Van Son.**

This *Charaxes* was described quite recently by Mr. G. van Son as a race of *xiphares*, but I am of the opinion that it is a good species as it resembles none of the other forms except superficially, and it has only one form of female. The light coloured anal fold is another feature which is quite conspicuously different from *xiphares*.

According to the author, the genitalia of the xiphares and citheron groups give no help in separating the species, and personally I think that *vumbui* is quite as different specifically as *xiphares* and *citheron*. Breeding seems to be the only method of proving this, and I recommend to collectors who live in their habitat to try and find the food plants and larvae of this interesting species, and thus do a service to science by recording their finds and observations.

Charaxes penricei f. peculiaris Lathy.

Certainly our rarest known *Charaxes*, but, as will be seen by the list of localities hereunder, very widely distributed over the Colony. Mr. E. W. Lannin took both sexes at Filabusi. I captured 2 males and 1 female near the American Mission station in the Matoppos, the late Captain John Swinburne took a male near Gwanda, Dr. G. Arnold a male at Sawmills, a male specimen was taken in the Lomagundi District, and Mr. Girdlestone reported one from Fort Victoria. I saw one other near Bulawayo on the 14th of March, 1939. They have mostly been taken in *Charaxes* traps, but also come to suck at mudholes in the very dry weather. It much resembles the common *C. achimenes*, but the bright bluish veins and suffusion, on the white transverse band of the hindwing, and the beautifully marked underside, make it unmistakable when handled. The female is coloured like the male with slightly broader markings, longer tails and is slightly larger.

Charaxes etesipe f. tavetensis Roths.

Another rare butterfly, so far only reported from the Vumba Mountains in this Colony. Some numbers have been taken by Mr. Lannin and Mr. Barnes; but they are distinctly scarce. The female has a yellowish-white median band much like the West African *etesipe*. I have not yet seen a female taken locally.

Charaxes etesipe Godt.

As far as I know Mr. Lannin is the only person who has taken this species in this Colony, and this was on the Vumba Mountains. It is a fairly common form in Nyasaland, whence come so many of our rarer species of butterflies, and it may yet be found to be more plentiful on the mountain ranges to the North East of the Colony.

Charaxes fulvescens acuminatus Thureau.

One specimen which is near this form was taken on the Vumba in February, 1924, on bait. It has not been seen since, according to reports sent to me. Unfortunately the tails were broken off in the net. Comparing it with specimens from the Congo, it is smaller, medially it has a lighter yellowish ground and the markings and ground colour are a shade darker brown towards the termen. The cell has only a small amount of yellow at its apex, with the spots arranged as in the type but larger. The redbrown margin of the

hindwing is more orange and the submarginal spots are, if anything, a shade darker brown. Underside like the type, with the undulate lines short and well distributed. The apices of the forewings are acutely angled and it appears to fit the description given by Thureau.

Charaxes achaemenes Fldr.

A very distinct variety of this insect was taken in the Lomagundi District. Captain Riley, who has seen it, agrees that it is only an aberration of this species, which was locally very common. Above the markings are much reduced, and greenish white on the hindwing, more glossed with green than tinted and the whole has a submetallic sheen. Below, the costal half of the forewing is chestnut with darker spots, and the other markings are quite different from the typical form of the species. As an aberration it is worth recording.

Charaxes pelias saturnus Btlr.

A perfect specimen of a gynandromorph of this species was obtained on the farm Westwood in the Wankie District in April, 1937. The male form is on the left and the female on the right. The differences between the sexes in markings and form are plainly discernible, and the specimen was quite freshly emerged when taken.

Argynnis aglaia Linn.

Two specimens of this species (or a form of it), were taken by Mr. Kinmont of Umtali, in December, on Castle Beacon in the Vumba Mountains. This is nearly the highest point of the range, being about 6500' a.b.s. In this locality, a small wild violet grows, and there seems little doubt that this species and the following, use this plant as food. I have not heard of a similar insect being taken in South Africa and Seitz does not list this species as occurring in Africa, in Vol XIII of the Macrolepidoptera of the World, but it is found throughout Europe and Asia. Forms of it occur in India (*eshretha* Evans, with a ♀ var *purpure* Evans and *vitatha* M) both found in the Chitral at over 8000', and it seems probable that it will be found all along the summits of our Eastern Borders wherever the wild violet occurs. Dr. Karl Jordan, to whom I submitted a photograph of one of Mr. Kinmont's captures, says that it is different in detail from any specimens in the long series in the British Museum, but is undoubtedly *Argynnis aglaia*. He remarks that "at first sight one is inclined to think that an accident has occurred". I refrain from giving a name to this probably new form, until more specimens can be obtained and carefully compared with those in the British Museum, but give here a tentative description for the benefit of local collectors.

Exp. al. 57 mm.

Above: ground colour light reddish yellow with black spots and bars. Below: (four black bars across cell, a sinuate black bar on discocellular veins, an oblique broken bar from near margin to vein 4 just beyond middle; three broad non-contiguous bars across areas 2, 3 and 4, with three spots nearer the margin of which the middle one is largest; a submarginal band of subtriangular spots from near anal angle to costal margin, of which the upper five are silvered.

Hindwing: ground colour fulvous, with large silver spots margined along the basal edges with narrow black lines, except in the case of those in the submarginal band, which have brown margins widest along basal borders. In the base of the cell is a silvery bilobed spot, beyond this, two round silver spots with black margins, the largest of which is nearer the base and slightly above the other; a large spot closes the cell. Three large irregularly shaped spots in area 8; two in area 7, the largest of which is distad; one elongated spot in area 6; one small triangular spot in area 5; a large elliptic spot in area 4; a smaller one in area 3; three in area 2, one at the base, a large irregular one in the median area and a reniform one further distad; an indistinct elongate spot with blackish inner margin, but only slightly silvered, in the median area of space 1. A submarginal band of large subtriangular spots running parallel to the margin, on both sides of which the ground colour is lighter.

This insect has been very assiduously sought for since its capture by Mr. Kinmont, but with the exception of the two specimens, has not been taken. The place where it was found is an open grass meadow more or less surrounded by forest trees, with a clear running mountain brook winding down the mountainside. The species of *viola* growing there has not yet been named for me, but is much like the European wild violet.

***Argynnis smaragdifera* Btlr.**

A very common species on the Vumba Mountains wherever the wild violet grows. I have not heard of it being taken from other South African localities. It is a typical *Argynnis* with large silver spots on the underside.

***Neptis saclava marpessa* ab. *sheppardi* ab. nov. Pl. X. Figs. 4a, 4b.**

A very distinct aberration taken by Mr. Sheppard in Meikles Jungle near Umtali. The ground colour is brownish black, there are no markings or spots in the cell, the large subapical spots are represented by minute elongate dots, the large spot in cellules 3 and 4 is absent altogether and replaced by 4 dots, 1 in area 2, 2 in area 3, and a diagonal streak in space 4. The inner marginal spot is small and divided more distinctly by the black vein. The band of the hindwing is broken up into 3 spots, of which the middle one is largest at the costa. There is also a short triangular bar running

from the inner margin to the middle of area 2. The marginal and submarginal markings are as in the type. Underside with the white markings reduced to conform to those of the upper surface. The bar closing the cell has not got distinct linear edges, but the dark brown of the bar gradually merges into the ground colour. The cell markings are much reduced and the white bar on the hindwing is hardly recognizable. The submarginal markings differ somewhat from the typical form, and the band of dark brown spots is larger. At first sight this specimen might easily be mistaken for a new species, but another was lent to me which was intermediate between this and the type.

***Neptis swynnertoni* Trimen.**

This handsome *Neptis* is common in the mountains of our Eastern Border. The intense black and white markings of the upper-side and the rufous ground colour of the underside make this butterfly unmistakable.

***Cymothoe coranus* Sm.**

Only recorded from Mt. Selinda in this Colony, where it has been taken by Dr. Arnold, Sheppard and myself. It is not common. The forest country nearer the coast seems to be its usual habitat. It is common in the Amatongas, and Dondo, P.E.A. and also in parts of Natal. In our forests it seems to have been replaced by *C. vumbui*.

***Cymothoe vumbui* B-Bak.**

A well marked and distinctive species found on the Vumba Mountains and in the forest down as far as the Witchwood Valley which is about 3500' lower than Castle Beacon. Elsewhere it is not common, but occurs sparingly in Chirinda Forest, and probably in suitable country on the Eastern slopes of the Shumanimani Mountains. Sheppard possesses two aberrations of the male which I hope to figure in some later paper.

***Cymothoe alcimeda* race *rhodesiae* Stev.**

Although the male of this Rhodesian race is so distinctly marked, the female is almost exactly like females of *a. trimeni* from the Woodbush Mountains in the Transvaal and *alcimeda* from the Cape. They also vary a lot and it seems impossible to pick out any particular markings peculiar to one form. It seems to be a very local form which inhabits the Elephant Forest on the Vumba and so far has been found nowhere else. In its own ground it is common enough, but is difficult to capture, as it is generally on the move "battling" with another of its own kin, over and around the tops of certain trees near the road. One occasionally gets a chance at them, when two or three of them get so intent on "outbattling" one another that they come down fairly near the ground.

Cymothoe alcimeda race **clarki**, race nov.

Three pairs of this distinct race have been sent to me by Mr. Gowan C. Clark of Port Elizabeth, bred from larvae taken on the Hogs Back in the Eastern Province. All these specimens have the dark markings almost jet black (piceous black might better describe it) instead of greyish black of the typical form and the light parts creamy. The distal border of the forewing of the male is unicolorous except for a few whitish lunules in areas 1, 2 and 3. The mark like a "lazy" W in the postmedian area of space 1, is well defined and black. There are two faint lines running through the basal half of the cell and the bases of the wings are much darker than in the type, and reach to about one third the length of the inner margin. There are a few indistinct spots in the postmedian area, and some sparsely diffused black scales near the costal margin, about the end of the discoidal cell. The margins of the hindwings are widely piceous, with small orange linear dots on the extremities of veins 1 to 5, that on 1 being the most distinct. A trace of the same colour at the apical angle; the light submarginal line is very narrow and not contiguous, the proximal, dark line is black, and the other lines follow the same pattern as in the typical form of the species, but are better defined. The base is much darker than the type and more widely distributed in so far as the dark suffusion is concerned. The underside of the type of this race is vinous, but it varies as do all the forms of *alcimeda*.

The female is piceous black with a dull creamy transverse band, a white chevron in the cell, three largish white spots in areas 5, 6 and 7 proximad to the apex of the transverse band, a small whitish spot in area 2 also just behind the band and the usual white spots distad, which vary in size and shape as in the females of the other forms of this species. The transverse band varies in width as usual. Two contiguous lunules with long points form the apex of the band and these are orange coloured to the naked eye, but are formed of mixed scales of cinnamon and cream colour and vary in individuals. The hindwing is coloured like the forewing, the band being widest in cellule 4. Five white spots on the distal side of the band and the orange linear dots on the extremities of the veins, as in the male. The underside of the female type is madder brown with cinnamon brown and white markings, but it also varies like the male.

The types were bred from larvae taken on the Hogs Back. The male type emerged on the 3.8.39 and the female on the 1.8.39, both bred by Mr. Gowan Clark of Port Elizabeth. The types and paratypes are in my collection.

Euryphura achlys Hopff.

Specimens of this tropical species have been taken by Messrs. Barnes and Lannin. Barnes' specimens were taken in the Witchwood Valley. It occurs also in the Amatongas and at Dondo in P.E.A.

Crenidomimas concordia Hopff.

Another well-known tropical butterfly which has been taken by Barnes in the Witchwood Valley and which also occurs in P.E.A. I believe that Barnes' specimen is the first record for Southern Rhodesia.

Euryphene senegalensis f. **orientalis** Karsch.

Another tropical species which is however fairly widely spread in Southern Rhodesia. Sheppard got it in Meikles Jungle near Umtali, Barnes in the Witchwood Valley and I took it on the Hibernian Mine in the Lomagundi District. It is common in P.E.A. It is very probably missed by its similarity when on the wing to commoner species. In the case of the first one I took, I certainly did not realize what I had captured until I handled it on arrival home. The rosy blush on the upperside makes it difficult to understand how it could be missed, especially when freshly emerged.

Pseudargynn's hegemon f. **nyassae** Bartel.

One specimen of this species taken at a mudhole near the Hibernian Mine in the Lomagundi District. Seen at close range it is easily distinguished, but when flying it almost exactly copies *Atella phalantha* which is so common everywhere. Two other specimens were recognized but not caught in the same place. Seitz gives Rhodesia as a habitat, but as far as I can find out this is the first record of its having been taken in Southern Rhodesia.

Salamis amaniensis Vosseler. Plate X. Figs. 1 and 2.

A brown species with an intense violaceous gloss and wide black apices on the forewings, which are almost rectangular in the male, but the female has a well defined tooth like our other salamis. It is nearly related to *S. cacta*, which is a well-known Central African species. It is somewhat smaller than our other *Salamis* species, with a brownish grey underside, and a well defined "leaf-rib" transverse line. The late Mr. Swynnerton told me that he had sent specimens to Oxford over 30 years ago, but I can find no record of its occurrence here. Tanganyika Territory is the only other habitat reported. They were very common in the Chirinda Forest in January, 1935, but seem to be more plentiful in some seasons than others, as previously I have collected there at all times of the year and have never come across it. Specimens sent to the British Museum by me were identified as belonging to this species, and it has been suggested that they are a form of *Salamis cacta* F.

Precis touhilimasa Vuill.

One specimen in the National Museum of Southern Rhodesia without label, one from Wankie and one from Lomagundi, constitute all the Rhodesian records of occurrences of this species as far as I can gather. It much resembles *P. artaxia*, which is common in

the Low Country and the Eastern Districts, but *touhilimasa* appears to be rare in this Colony. The hindwing is shot with bright metallic blue and not plain brown like *artaxia*.

***Apaturopsis cleocharis* Aur.**

This rare butterfly inhabits Chirinda Forest and has been frequently taken there. It resembles a small *Pyrameis cardui* L. and generally flies close to the ground, settling on low herbage much like that species. I have not heard of it being taken elsewhere in the sub-continent.

***Crenis rosa* Hew.**

A female of this species was taken close to Bulawayo in a very battered condition by Dr. Arnold. At Dondo in P.E.A. it is very common indeed, and when seen flying in large numbers in the rays of the morning sun through the glades of the tall forest there, with their lovely bluish violet uppersides glinting in the bright rays of the sunlight and reflecting it, like glittering falling flakes of silvery blue, they are a sight never to be forgotten. How one ever came to be so far away from heavy tropical forest, which is their usual habitat, is a mystery and difficult to explain. Barnes has taken it in the Witchwood Valley so it must be included in our Southern Rhodesian list as an inhabitant.

***Acraea conradti vumbui* ab. *barnesi* ab. nov. Plate XI. Fig. 5.**

Two specimens of this race, captured by Barnes on the Vumba Mountains, are certainly aberrant and worthy of a name. In the forewing the submarginal transparent spots are absent, being clothed with a thin sprinkling of red scales. The lighter spots on the hindwing of the typical race are also clothed like the rest of the wing, and the black basal spots are a good deal larger and in many cases confluent. The type is in Barnes' collection. I might here mention that specimens almost identical with the typical *conradti* Ob. have been taken on the Vumba but the local race is by far the commonest form there.

***Acraea cabira* f. *apecida* Oberth.**

This is the form of *cabira* which is found all along our Eastern border, and I have never seen f. *natalensis* in any part of Southern Rhodesia. On the farm Steynstroom in the Northern Melssetter District this form is particularly common but occurs all along our Eastern Districts.

***Acraea cabira apecida*, var. *swinburnei* var. nov. Plate. XI. Fig. 6.**

Several specimens of this variety were taken in the Chirinda Forest in December, 1928. The subapical band of the forewing is connected to the discal patch in the cell by three narrow streaks of red in areas 4, 5 and 6. These streaks are also visible on the under-

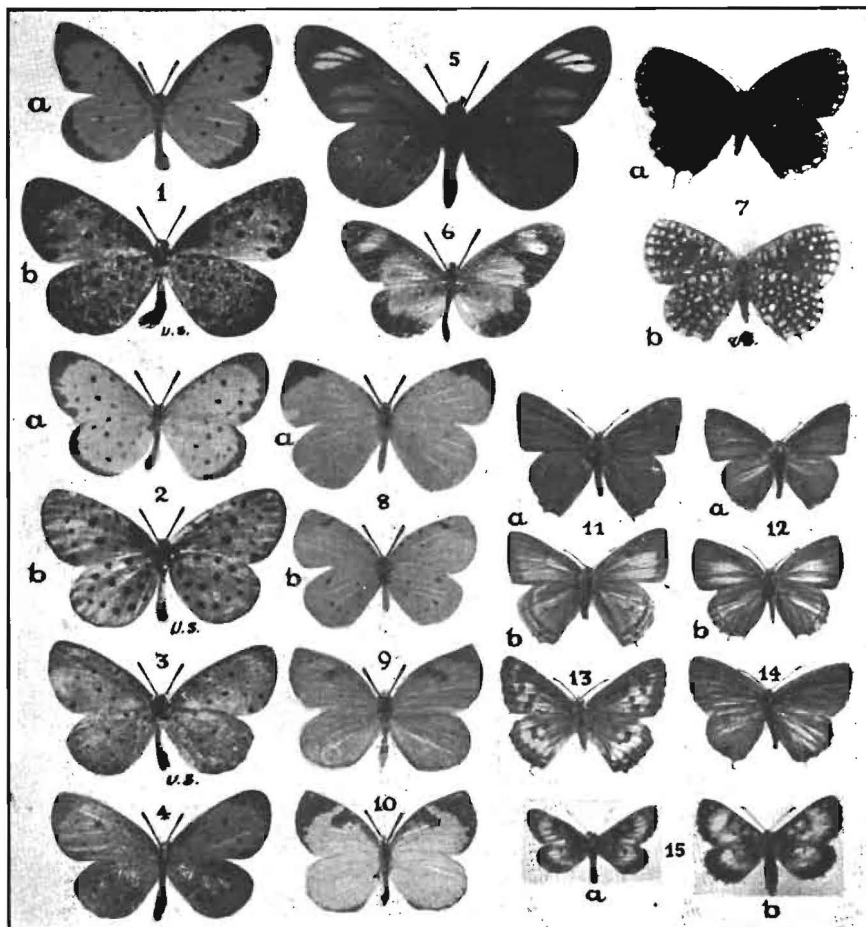


Plate XI.

- Fig. 1a: *Pentila amenaida* f. *swynnertoni* form nov. Mt. Selinda, P.A.S.
 1b: Underside of same.
 2a: *Pentila nyassana* f. *obsoleta* H.Sm. Lomagundi Dist.
 2b: Underside of same.
 3: *Pentila connectens* Riley. Kitale, Kenya; for comparison.
 4: *Pentila nyassana* obsoleta, var. *cataractae*, var. nov. Type from Victoria Falls, S.Rhod.
 5: *Acraea conradti* vumbui, ab. *barnesi*, ab. nov. Type from Vumba Mountains, S.Rhod. (B. D. Barnes.)
 6: *Acraea cabira* apocida, var. *swinburnei*, var. nov. Type from Mt. Selinda, S.Rhod.
 7a: *Zeritis sorhageni* Dewitz. Upperside. Westwood, Wankie Dist.
 7b: Ditto. Underside.
 8a: *Teriomima puellaris* Trim. Upperside.
 8b: Ditto. Underside. Witchwood Valley, S.Rhod. (B. D. Barnes).
 9: *Teriomima aslauga* form *pallida* Trim. Victoria Falls.
 10: *Teriomima aslauga* Trim. Victoria Falls.
 11a: *Anthene barnesi* ♂. sp. nov. Type Vumba Mts.
 11b: Ditto. ♀. sp. nov. Type do.
 12a: *Anthene bihe* B-Baker. ♂ Inyanyadzi River, S.Rhod.
 12b: Ditto ♀ ditto Type. (P. A. Sheppard).
 13: *Uranothauma antinorii* f. *felthami*, Stev. Type. Mt Selinda.
 14: *Uranothauma falkensteini* Dewitz. Vumba Mts. (B. D. Barnes).
 15: *Alaena margaritacea* Eltr. ♂ & ♀. Haenertsburg (J. Swinburne).

side. The specimens are smaller than the average of typical specimens of the form *apecida*, being only 36 mm. in total span. Otherwise they are identical.

***Acraea acrita* ♀ f. *msamviae* Strand.**

I found this form in the valley of the Hunyani River near Yomba in the Lomagundi District. The black areas on the hindwings are very noticeable and I think it is probably an extreme wet season form, although I saw no others in the locality.

***Acraea welwitschi* f. *alboradiata* Auriv.**

In September of 1931, certain trees in the vicinity of the settlement at the Victoria Falls on the Southern side of the Zambesi River, were literally swarming with this insect, evidently attracted by the sweet smelling white flowers with which these trees were at that time heavily bedecked. It is a noteworthy fact that I took several pairs in copula, the male of which was *anemosa* and the female *alboradiata*; and one pair with the sexes the other way, the male being *alboradiata*, this being by far the most common butterfly there at that time; *anemosa* was also present in some numbers. Whilst I was busy trying to catch them, and waiting for stragglers to come down within reach, a cloud of red locusts came over the country flying high. Immediately all the butterflies came down to the ground or hid amongst the branches of the trees and remained there until the locusts had flown past. It is perhaps needless to add that I scooped a rich harvest of what was to me, a rare *Acraea* which I have met with nowhere else in this country.

Since the publication of my paper on the **LYCAENIDAE** in the Occasional Papers of the National Museum of Southern Rhodesia, several new and unrecorded species have been discovered.

***Pentila nyassana obsoleta* Hawker-Sm. Pl. XI. Figs. 2a, 2b.**

Up to December, 1938, I had only seen two specimens of this species taken in S. Rhodesia but in February and March, 1938, I found it very numerous in a small area in the Lomagundi District. I took a long series, amongst which were several minor varieties, in fact hardly two specimens taken were absolutely alike. The variations were mostly in the absence or intensity of the black spots on both sides of the wings. The ground is buffy yellow, sometimes orange towards the base, or whitish yellow in the discal areas and brighter yellow in the bases and apices. The extent and width of the black margins varies very little. It is like all its congeners, a very weak flier and I have always found it in sparse bushy country with long "tambootie" grass, flying along pathways or over open spaces and frequently settling on grass stems. In the early mornings it could be taken with the fingers whilst at rest, as it does not take flight until the sun is well up. The underside of this species is not

speckled with fine brown vermiculations, but the ground colour is immaculate, with the black spots well defined. A very distinct variety of the species is described hereafter.

***Pentila nyassana obsoleta* var. *cataractae* var. nov.** Plate XI. Fig. 4.

Several examples of this variety have been taken near the Victoria Falls. It is exactly like the type form in shape and size, but the ground colour is orange yellow, deeper at the base and on the hindwings, the apex and outer margin is deeply banded with blackish brown, much browner than the typical form *obsoleta*, more suffused at the inner margins; costal margin fine and dark brown, speckles of dark brown from the base of the costa to beyond the middle where the speckles overlay the dark spots which are ovate in shape, one subbasal and one about a third of the length of the costal margin from the base. A round black spot on the end of the cell and another near the base of cellule 2, three small dots in cells 2, 3 and 4 in a line running parallel to the two spots near the costa already mentioned. Hindwing speckled all over, sparsely in the cells but thickly on the veins. A wide marginal band from the anal angle to well over half-way to the base of the costal margin. The same colour fills the abdominal fold. A black spot in the middle of cellule 1, a large lunule post medially situated and a small dot towards the base of the cell. Underside exactly as in *obsoleta*. The type is a male and was taken at the Victoria Falls on the 10th of February, 1925. Others are in the collection of the National Museum of Southern Rhodesia. The type is in my own collection.

***Pentila amenaida* f. *swynnertoni* f. nov.** Plate XI. Figs. 1a and 1b.

Expl. al. 40 mm.

Male: Reddish yellow with broad black borders and spots, and fine brown speckles at the base and the costal margin. Forewing: ground colour reddish yellow, narrowly black along the costal margin, widest from the base to about quarter the length of the costa, the whole freckled with small linear dots not evenly distributed, which gradually merge into the broad, apical, marginal band. This begins about level with the apex of the cell; another largish one on the costal side of the fold in the cell and about half-way or less from the base, a small one in line with this on the outer side of the fold, two smaller ones placed diagonally across the cell and lower down one on each side of the fold. A few of the fine vermiculations enter the cell near the base along the costa and there are several small dots on the bases of areas 8, 9 and 10. A small dot in area 1 and a larger one in area 2; 3 indistinct dots about the middle of areas 2, 3 and 4.

Hindwing coloured like the forewing but slightly lighter along the inner margin and base of costal margin. One median sized spot below costal margin, another at end of cell, two indistinct ones in the cell on the fold, a small spot in area 2 near the centre and an indis-

tinct one in area 2 towards the base. Black marginal band 2 mm. wide and reaching from anal to outer angles finishing at each end in a point.

Underside: Ground colour somewhat lighter than above. The fine black vermiculations form a sort of band from the base to the anal angle of the forewing, coming well into the cell, widest before the apex and narrow along the outer margin. The whole of the hindwing is covered with these fine vermiculations fairly evenly spaced, giving the hindwing below a greenish appearance. In the cell there is a small black spot, near the base two smallish ones; and two larger ones one on each side of the fold and about evenly spaced between each pair. A large spot near the apex of the cell about the middle, a row of 6 spots forming a submarginal band nearer the margin at the anal angle and receding from the apex in an even curve. The 3 indistinct spots of the forewing above are clearly marked on the underside as are the spots near the base in 1 and 2. The basal and median spots are as above; but there are two rows of very distinct black spots running parallel to the outer margin, one postmedially and the other submarginally, the proximal one consists of 5 smallish dots and runs into the other which has largish spots six in number, below the apical angle. The spots are inter-neural. Small marginal spots at the apices of the veins break into the yellow cilia, as does a smallish tuft at the anal angle. A very fine black linear margin broken near the apex by yellow is discernible with a glass, on the outer margin of the forewing.

Thorax and abdomen dull yellow above, with some small black tufts near the epinotum and collar. Below blackish yellow. Antennae dull black, clubs slightly lighter.

This form was taken by P. Sheppard in the Gungunyana bush on the Estate of the late Mr. C. F. M. Swynnerton and it is named in memory of this well-known naturalist, whose untimely demise has left his scientist and other friends a feeling of irreparable loss. Type and several paratypes in Sheppard's collection, others in mine. March, 1938.

Deudorix caerulea f. caerulea Ham-Druce.

A specimen of this, the type form, has been taken by Mr. P. A. Sheppard in the Umtali District. The colour of the hairpencil and the lighter colour above, differentiate it from its locally commoner form *obscurata*.

Deudorix bimaculatus Hew. (= *lorisona* Hew.)

Capt. Riley of the British Museum has pointed out to me that Hewitson described the male and the female of this insect as separate species, in the same paper, and, that as the female was described first under the name *bimaculatus*, this name must stand and *lorisona* must sink in synonymy. It is not a rare insect on the Vumba Mountains.

Iolaus silas f. lalos Druce.

Mr. Sheppard has taken both sexes of this form in the Umtali District and he tells me that the males differ considerably from the typical *silas*. Should it not be treated as a separate species?

Phasis aranda f. marshalli Aur.

Through the kindness of Capt. Riley, I have now in my collection a specimen of this form, and there is no doubt that it is only a form of *aranda*, as pointed out by the donor.

The old and well-known name of **LYCAENESTHES** has to be abandoned, as the Genus was named *Anthene* by Doubleday as early as 1847, and must now be referred to by this latter name. The genotype is *Anthene larydas* Cramer.

Anthene sheppardi sp. nov. Plate XII. Figs. 2a, 2b, 6a and 6b.

♂ Exp. al. 39 mm. ♀ 40 mm.

Male upperside: dark plumbeous brown with a deep purple lustre, distinct velvety black margins widest at apex of forewing and narrowly linear on hindwings on which is also a largish triangular spot with its apex basad, separated from the linear margin by a fine white line, at the apex of area 2. A much less distinctly marked spot on the apex of space 1. The veins are outlined in black and there is a crescentic, black bar across the end of the cell. A narrow, black marginal band runs from the base of costa to the junction of veins 7 and 8, nearly 3 mm. wide at apex and narrowing down to 1 mm. at the end of vein 3. On the hindwing the black costal margin is broad to below the apical angle. Tails and cilia whitish. In some specimens indistinct triangular spots occur in areas 3, 4 and 5 inside the margin, which is almost linear and brownish black. The ground colour of the underside is soft greyish brown, the bands are margined by white and are a darker shade than the ground colour. Pattern like *definita*, no subbasal spots, eyespot in area 2 rounded inwardly, margined by a dark golden lunule proximally and sparingly sprinkled with greenish silvery scales on the black. A smaller spot in area 1 also sprinkled with similar scales; a narrow dull golden line borders this spot proximally and reaches about a third of the way from the anal angle to the inner margin. Linear margins dark-brown, cilia white at base with white tips in areas 1 and 2, otherwise dull greyish. Body black above. Antennae black with white rings. Hairs on body below, greyish. Abdomen dull white. Female: dull sepia brown, discal area lighter and base darker. A distinct brown bar across the apex of the cell; linear margin and cilia light brown, in some specimens a light patch in area 2, but this is variable as the type specimen has no sign of it. Hindwing with a variable amount of white generally in the form of proximally pointed lunules, most distinct in areas 2 and 3, but sometimes in subrectangular patches and in one specimen in two

small rows of lunules fairly well apart. Distinct black triangular spots bordered with white at the apices of areas 1 and 2, that in No. 2 always being the largest. Linear margins dark brown and cilia white.

Underside: greyish white slightly darker in the basal area of the forewing, markings ashy brown, the white margins of the spots not so prominent as in the male owing to the lighter ground colour, there markings are arranged in an even arc except for the spot in area 2 of the forewing which is somewhat diagonally placed. The large black spot in area 2 of the hindwing is rounder than above, has some silvery green scales sprinkled over it and is nearly completely surrounded by a ring of old gold, a line of the same colour half envelopes the spots in the proximal half of the apex of area 1 and the anal fold. Both these spots have a few iridescent scales on them. A fine dark linear margin on the termen of both wings. Body above, brown, below white. Antennae black with the joints narrowly white. Clubs ashy brown at the apices.

This species is much like *A. alberta* B-Bak. (Trans. Ent. Soc. 1910. p. 28, and Plate 1. Fig. 10) of which the male only is described. It is however a larger insect being 39 mm. against only 30 mm. of *alberta*, the wide margins are black, not brown and the black triangular spot near the margin of the hindwing has no iridescent scaling, is larger and there is no smaller spot near the anal angle. In the female the large triangular spot is very conspicuous and the sepia brown of the upper side of the hindwing is like no other species described.

I have before me 6 specimens of each sex all taken in Chirinda Forest by Mr. Sheppard in March, 1938. The males vary slightly in size but not in colour or underside markings. There is a slight variation in the number and shape of the triangular marginal spots on the hindwings, but none shew any signs of an orange border. One specimen is slightly redder brown than the others. The females vary more in the extent of the white markings, but the submarginal spots of the hindwings being triangular and without orange ornamentation, make them easily recognizable.

I have much pleasure in naming this *Anthene* after my friend Mr. Percy A. Sheppard of Umtali, its discoverer. The types are in his collection and the paratypes in mine.

***Anthene nigeriae* Auriv. Plate XII. Figs. 9a, and 9b.**

This species has been taken by Barnes on the Vumba Mountains and was determined for him by the British Museum. I have not seen the male, but he has kindly sent me several females. Sharpe's description of the male reads as follows: "Forewing above light azure blue apex and margin with a dark line****, hindwing like the forewing with fine dark marginal lines, before the margin a row of white dark pupilled spots, largest in area 2, near the anal angle

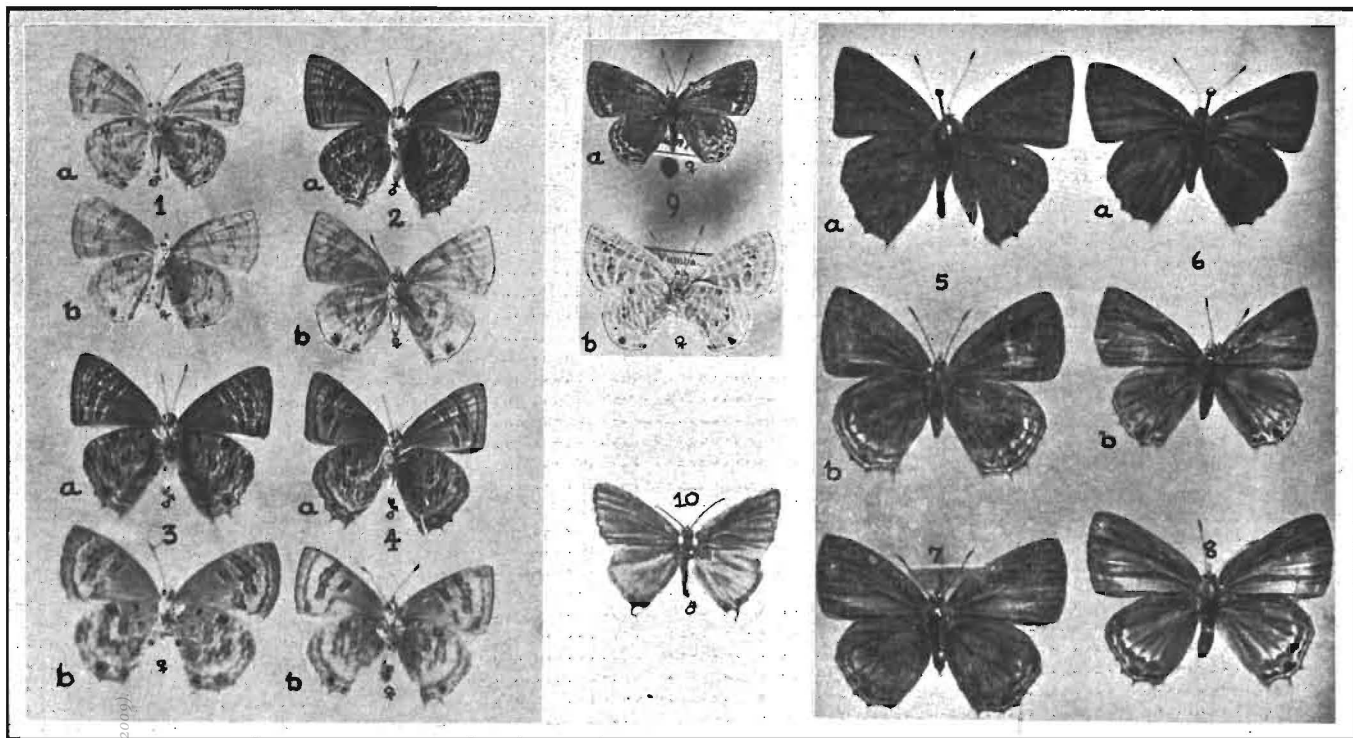


Plate XII.

- Fig. 1a: *Anthene bihe* B-Bak. ♂ underside. Inyanyadzi River, S. Rhod.
 1b: *Anthene bihe* B-Bak. ♀ underside. Inyanyadzi River. (P. Sheppard).
 2a: *Anthene sheppardi* sp. nov. ♂ underside. Chirinda Forest (P. Sheppard).
 2b: *Anthene sheppardi* sp. nov. ♀ underside. Chirinda Forest (P. Sheppard).
 3a: *Anthene indefinita* B-Bak. ♂ underside. Chirinda Forest (P. Sheppard).
 3b: *Anthene indefinita* B-Bak. ♀ underside. Chirinda Forest (P. Sheppard).
 4a: *Anthene barnesi* sp. nov. ♂ underside. Vumba Mts. (B. Barnes).

- 4b: *Anthene barnesi* sp. nov. ♀ underside. Vumba Mts. (B. Barnes).
 5a: *Anthene indefinita* B-Bak. ♂ Chirinda Forest.
 5b: Ditto ditto.
 6a: *Anthene sheppardi* sp. nov. ♂ ditto.
 6b: Ditto ditto.
 7: *Anthene lemnos* Hew. ♀ Durban. H. M. Millar.
 8: *Anthene lasti* Sm & Ky ♀ Chirinda Forest.
 9a: *Anthene nigeriae* Aur ♀ Vumba Mts. (B. D. Barnes).
 9b: Ditto. ditto. Underside.
 10: *Uranotauma antinorii* f. *felthami* Stev. ♂ Chirinda Forest.

another row of white spots". This description conveys little to most people and personally I can make nothing of it.

The female is light brown above, with a fine brown linear border and whitish cilia. On the forewing it has a postmedian row of white lunules more distinct in some specimens than in others in the areas 1, 2, 3, 4 and 5. That in number 1 is the most distinct; another submarginal row of white lunules enclosing some of the ground colour are almost linear especially in area 1 which is crossed by the line from vein to vein. The hindwing has also a postmedian line of lunules, a submarginal row of white ringed spots of the ground colour except that in area 2 which encloses a spot of jet black. The linear border is more distinct in the hindwing than in the forewing and the cilia whiter. Tail tufts white. The ground colour of the underside varies from ashy brown to ashy grey, but the most outstanding features of the underside are the dark centres of three or in some cases four spots in the postmedian area of the forewing and the subrectangular spot near the inner margin with white borders on the distad and proximad sides only. There is a row of three or four dark centred spots in the postmedian area of the hindwing and a large ornamented subtriangular spot in area 2 near the anal angle. Mr. Barnes is to be complimented on his discovery, as this is certainly a new record for this subcontinent.

Anthene indefinita B-Baker. Plate XII. Figs. 3a, 3b, 5a and 5b.

This species, not hitherto recorded from South Africa has been taken in some numbers by Mr. P. Sheppard in Chirinda Forest. They were identified for me by the British Museum.

Anthene barnesi sp. nov. Plate XI. Figs. 11a, 11b; and Plate XII. Figs. 4a and 4b.

Exp. al ♂ 26-28 mm. ♀ 28-31 mm.

Male: ground colour dark sepia with a dense purple sheen. A fine linear black margin on the costal and outer margins. Two narrow, black markings in area 1 near the anal margins of the hindwings, separated by a faint purplish grey line, which, in some specimens is only represented by a few greyish scales. Cilia whitish. Tails grey with white tips.

Underside: forewing, ground colour yellowish grey, markings margined with white, darker in the centres, a lighter band than the ground colour on the proximal side of the submarginal line of lunules. Markings arranged much like *sylvanus*. The sub-basal dots not so distinct and a warm brown colour in the centres. The spaces between the spots much lighter than in that species; spot at anal angle black with a few bluish scales and a yellow spot on the basal margin. A similar spot in area 1 is much larger.

Female: the forewing has a light blue base, cell and median area up to vein 4. Costal margin to end of cell greyish brown, a

large black spot at the end of cell, rest of forewing ashy-black with a darker submarginal band about 1 mm. wide from apex to anal angle, base somewhat shaded, veins brown. Hindwing, light blue in areas 1 to 5 from base to dark submarginal band, a slight bluish shading in areas 6 and 7, black line across the apex of cell, a black spot in the median area of space 4, veins distinctly dark brown, submarginal band about 2 mm. wide and brown and a thin white line which is blue shaded on the distad side. A decorative spot intrudes into this line in space 2 which is margined with white with a large orange spot on its proximal side. The linear margin is blackish brown. Cilia white, tail tufts black with white tips. Body blackish brown above. Antennae black, narrowly white at the joints. Underside: dull white with distinct brown markings with lighter centres, broad spot at extremity of cell, submarginal band a very light clay colour lighter distally and divided by a white linear stripe. In the hindwing the subbasal spots are small and dark brown bordered by white, the median spots are arranged as in *sylvanus*; the submarginal linear bands like the forewing, marginal spots large and distinct in areas 1 and 2. Cilia light brownish grey, tail tufts grey with white tips. Thorax and abdomen whitish. Tarsi greyish brown with white joints.

It is nearest to *lemnus* Hew. and *sylvanus* Drury but the lustre on the ground colour is a much darker purple and the two black cross bars near the apex of cell 2, distinguish the male from either of these species. The markings on the undersides vary a great deal in individuals, but all have the submarginal spots. The female is quite distinct and much whiter on both surfaces than either of the species used here as comparisons. There are specimens in the British Museum unnamed but long since recognized as belonging to an undescribed species.

Several specimens of both sexes were sent to me by Mr. B. D. Barnes of the Vumba in the Umtali District, I have much pleasure in naming it after him. I have 6 specimens of each sex before me, and with others which I have seen, they shew very little variation. The undersides of some females are lighter in ground colour than others, in one case so white that the spots were almost obsolete but in most species of this Genus the females have a lighter ground colour than the males and vary a good deal. It has been suggested to me that this species is a local race of *sylvanus*; I certainly think that *lemnus* ought to be considered a race of that species and I hope that someone who can get plenty of material will clear up this point. All the specimens of this species which I have examined are from the Vumbu Mountains but the dates of capture are obscure. The type of the female is dated 11.11.37 (B. D. Barnes), the male type, 16.3.37, and both are in my collection with 10 paratypes. Other specimens are in the collections of Barnes and Sheppard.

Hypolycaena pachalica Btlr.

This species must now be included in our list of South African butterflies, as it has been taken in some numbers in Northern Zululand by Mr. H. M. Millar of Durban. The red spot on the upper side of the hindwings in area 2 is larger than in *philippus*, there is a distinct violet sheen over the brown upperside of the male and it is distinctly darker generally. On the underside the transverse bands are more prominent and orange and the space between the submarginal band of the hindwing and the margin is almost white. Otherwise it is much like *philippus* though generally smaller. The female is more like that species but the red spot on the tornus of the hindwing is more conspicuous. Mr. Millar had labelled it as a variety of *philippus*, but there is no doubt that it is this species described by Butler. As far as I can find out it has not previously been recorded from South Africa.

Axiocerses punicea Smith.

Another new record for South Africa, and again from our Eastern Border; its capture is to the credit of Mr. Barnes. In general appearance it is very like *amanga*, but the red areas of the wings of the male are much darker, almost "Indian red", and of lesser extent. The black parts are intensely black and sharply defined. The female is much lighter above and in most cases has very little black about it. The undersides have a very distinct line in space 1b of the forewing. A few silver spots are often present and the ground colour varies from orange to blood red and sometimes has a violet sheen on it. Mr. Barnes has taken some numbers on the Vumba Mountains.

Uranothauma falkensteini Dew. Plate XI. Fig. 14.

Another record due to Mr. Barnes, but since reported from the Sabi by Mr. Plaut Carcasson. It appears to be fairly common on the Vumba Mountains and the Umtali District, but I cannot find out if it occurs in the Witchwood Valley (2500') or on the Vumba (6000'). Judging by Mr. Plaut Carcasson's capture, I should think it is a low country species and not likely to be taken on the mountain. It much resembles a female of *U. nubifer*, but is more golden and smaller.

My thanks are due to the collectors mentioned who have sent me records of their captures and also for their gifts of specimens for my own collection; and further to Mr. Neville Jones, Keeper of Prehistory in the National Museum of Southern Rhodesia, for arranging the plates and the exercise of much patience.

Bulawayo,

30th January, 1940.